losses. For this, measures like selective lining in the conveyance system, modernisation and rehabilitation of existing systems including tanks, recycling and re-use of treated effluents and adoption of traditional techniques like mulching or pitcher irrigation and new techniques like drip and sprinkler may be promoted, wherever feasible." The Prime Minister has also made an appeal to the Nation for making water conservation a National Mission. The Government encourages various measures for conservation and efficient use of water.

Water consumption in Thermal Power Plants

2317. SHRI PREM CHAND GUPTA: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether it is a fact that as per a recenty study on water resources in our country, Thermal Power Plants consume 87.87 per cent of the water consumed by the industry;

(b) whether it is fact that this water is consumed inefficiently and the consumption per power unit is 8 times that of international standards and costs a pittance; and

(c) if so, what are Government's reaction thereon?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRIMATI BIJOYA CHAKRAVARTY): (a) As per assessment made by the "National Commission for Integrated Water Resources Development Plan", the consumption of water by Power Plants is about 30% of that by the industries.

(b) Thermal Power Stations consume relatively higher amount of water for condensation of steam and for cooling of auxiliaries and ash disposal. Most of the old power stations have a once through cooling system where though large cooling water is drawn from the water body and most of it is discharged back to the water body after circulation through the cooling system. As such, a very small quantity of 2-3% of the total water drawn is actually consumed. Due to ambient conditions of higher temperature, heat rejection in stations in India is higher which increases the cooling water requirement.

(c) Following steps are taken to conserve water used in power stations:—

(i) As per Ministry of Environment and Forests, it is necessasry for all new stations to provide closed cycle cooling water systems where only a very small quantity of cooling water (2-3%) of the once-through system is drawn from the water body for make up purposes. Zero discharge concept is also being adopted wherever possible.

(ii) To reduce consumption of water for ash disposal, ash water recycling system is being provided in all the power stations. Further the utilisation of ash has been made mandatory and the utilities have been directed by Ministry of Environment and Forests to achieve 100% ash utilisation within a stipulated period. This will reduce the consumption of water in thermal power stations for ash disposal.

(iii) In case of coastal locations, seawater is used for condenser cooling.

(iv) Further, new techonology means such as dry cooling of condensers etc. are being considered for optimizing cooling water requirements of Thermal Power Stations.

12.00 NOON

STATEMENT BY MINISTER REGARDING ANSWER TO S.Q.NO. 270

THE MINISTER OF AGRICULTURE (SHRI RAJNATH SINGH): Sir, I lay on the Table a Statement (in English and Hindi) showing Comprehensive Picture of Assistance for Drought Relief (2002-2003 and 2003-2004 in regard to answer to Starred Question No. 270, in pursuance of the direction by the Deputy Chairman on the 19th December, 2003.

PAPERS LAID ON THE TABLE

I. **Report and Accounts (2002-2003) of the Hindustan Aeronautics Ltd. (HAL), Bengalore and related papers.**

II. **Report and Accounts (2002-2003) of the Aeronautical Development Agency (ADA) Bangalore and related Papers.**